New hampshire







Fall 2006

Materials and Research Bureau Moves Next To The Morton Building in Concord Modern New Secure Building Offers Twice The Space for Transportation Research



Chemist Melissa Sytek on the job in the new Chemistry Lab at the new Materials and Research Bureau Building.

The NHDOT Bureau of Materials and Research has a new home for its 60 employees and the many pieces of sophisticated equipment that only they know how to use.

The bureau completed its move in July from its long-time location on Stickney Avenue to its brand new 30,000 square foot space (twice the size of its previous location) at the Hazen Drive complex right next to the NHDOT headquarters in Concord.

The \$5.8 million project was built with extensive input from those who are working there. Among its more unique characteristics is a very complex HVAC

(heating, venting, and air conditioning) system that moves a much greater amount of air in a building with several working laboratories, which includes a concrete and soils laboratory, and a hot mix lab.

"It's great. Our people are very pleased," says Materials and Research Administrator Alan Rawson. "They've been involved and a part of this project from the start. We're now closer to Project Development, we've got adequate space and we're set up to be in place for many years."

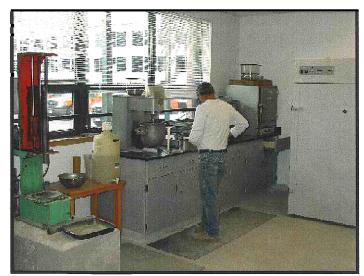
The first floor of the new Materials and Research Building includes a concrete and soils lab, a hot mix lab, a muster room for exploration crews and storage rooms. Housed on the second floor is office

space, a chemistry lab, a geotechnical lab and employee break room.

The new building also houses three conference rooms (one for up to 26 people and two for 10-15 people), a garage area for the ride quality and pavement management vans, a haz-mat storage area, a convenient drop-off room for construction-related testing samples and a loading dock for geotechnical crews to more easily off-load rock cores, soil samples and equipment.

"We're pretty complex. We have four different sections that do a lot of different things," Alan Rawson says.

Materials and Research plans to show off its new home at a late fall open house.



Soils lab technician Rick Dickerman monitors a concrete mix in the new soils and concrete lab on Hazen Drive in Concord.





Commissioner's Corner by Carol A. Murray

Putting the Interstate System's 50th Birthday in Perspective – Looking Back and Looking Ahead

Most of the parties have been held. Speeches have been made, ribbons cut and candles blown out. The nationwide 50th birthday bash of the Interstate Highway System is winding down.

It's been a celebration that has drawn a significant amount of media attention. Most of the news stories have had similar themes consistent with the message of those commemorating the milestone – recognizing the significant contributions the Interstate Highway System has made to this country, while also pointing out the need to invest in rehabilitating an aging and heavily used transportation network.

That need is not going away and will only grow with each passing month and year. The "Highway, Bridges and Transit Conditions and Performance Report" released by the U.S. DOT in March 2006 shows that the annual highway capital spending needs to ramp up from the \$68.2 billion invested by federal, state, and local governments in 2004 to \$118.9 billion annually to meet national needs.

Here are some more interesting numbers and factoids gleaned from a newly released book by the American Association of State Highway and Transportation Officials (AASHTO) entitled, "Celebrating 50 Years of the Interstate Highway System":

 When the Interstate Highway System was authorized in 1956, it was projected to cost \$25 billion to build over 12 years. When essentially completed in 1991, it had cost \$114 billion over 35 years.

- The Interstate Highway System comprises 47,000 miles that carry 24 percent of travel on just one percent of the nation's roadways, including 41 percent of total truck miles.
- In the three decades ending the 20th century travel in the US grew three times as fast as the growth in population.
- From 1980 to 1991, investments in the total highway system by all levels of government averaged a net rate of return of 14.6 percent, well above the average return for all private investments.
- For every dollar invested in federal transportation infrastructure, an estimated \$5.70 in economic activity is generated.
- One-fifth of the increase in productivity in the US economy from 1970 – 2000 was attributed to investment in highways.
- For every \$1 billion invested in federal highway and transit spending, 47,500 jobs are created or sustained.
- Every additional \$1 billion investment in highway and transit infrastructure creates 47,500 new jobs, supports almost \$2 billion in family earnings and generates \$540 million in federal income taxes.
- Americans spend 20 percent of their total household budgets on transportation. About 94 percent of household transportation expenditures go to purchase, run, and maintain private vehicles.
- 84% of the \$7 trillion worth of commodities delivered annually from sites in the U.S. are transported on American highways.
- Traffic congestion costs American motorists \$67.5 billion a year in wasted time and fuel costs as Americans spend an additional 4.5 billion hours a year stuck in traffic.

Many of these bullets point to the benefits of investing in both the Interstate System and the nation's highways. Good roads are crucial to a thriving economy and our quality of life. It's a message that must continue to be spread long after the 50th birthday party is over.



Fall 2006

Governor	John H. Lynch
Commissioner	Carol Murray
On the Move Editor	Bill Boynton

PRINTED IN THE NHDOT PRINTSHOP ON RECYCLED PAPER

District 2's Steve McKinley Remembered One Year Later by Co-workers

More than 75 NHDOT employees commemorated the one year anniversary of Stephen McKinley's passing in an automobile accident on August 24th.

Co-workers from District Two, Mechanical Services, Survey and Construction made quick work of setting a red oak tree and assorted shrubs as well as fencing and a park bench fashioned from granite curbing.

Steve was a fixture in the district for over thirty years and his absence is felt on almost a daily basis. The eagerness of the project activity as well as the attention during a dedication ceremony was a testament to the respect still held for Steve.

Steve's call number 233 has been retired from use. His wife Bev, father John and son David were able to attend the ceremony and barbecue lunch.

Alan Hanscom's closing comment summed it up: "May we never have to do this again."







Commissioner Murray commends Rep. Janice Peaslee for her efforts in getting the Stratford-Maidstone bridge reopened in a September 28 ceremony.

Bridge Named After Vermont Lawmaker

Lawmaker Janice Peaslee is not one of the 400 members of the New Hampshire House of Representatives, but the State Representative from northern Vermont certainly knows Commissioner Carol Murray's phone number. She dialed it many times over the years in her quest to get the long closed bridge over the Connecticut River between Stratford, NH and Maidstone, VT rehabilitated and reopened.

That finally happened in the summer of 2005, and on September 28, 2006 a ceremony marked the renaming of the bridge as the "Janice Peaslee Bridge". The cost of the \$2 million rehabilitation was shared by Vermont and New Hampshire.



New Emergency Operations Center Will Feature Centralized NHDOT Dispatch

The new State Emergency Operations Center in Concord will house the NHDOT Transportation Management Center (TMC), the NH Department of Safety statewide 911 Public Safety Answering Point, the State Police Statewide Dispatch Center and the Emergency Management Operations Center.

The 52,000 square-foot building is located near the new Mechanical Services building on NH Route 106. The NHDOT area is about 4,500 square feet. The total building cost is about \$10.4 million with the NHDOT portion totaling around \$1.9 million.

According to NHDOT Project Manager David Rodrigue (Traffic Bureau), the Transportation Management Center (TMC) will house NHDOT T operators who will



While the building is nearing completion, it will be the middle of next summer before the Transportation Management System is designed, built and functional. Dispatching could be operating out of the building as soon as December.

provide NHDOT dispatch and Transportation Management 24 hours a day, seven days a week for the maintenance of New Hampshire's state roads. The TMC will include a 13' by 20' video wall capable of displaying maps, graphics, plans and full motion video. The TMC will receive information from Intelligent Transportation System (ITS) devices such as cameras, both security and traffic monitoring, Road Weather Information Systems (RWIS), and traffic sensors measuring vehicle volumes, speed, classification, and the percent of time vehicles are detected. The Transportation Management System (TMS) will provide the "intelligence" for the TMC to receive this information and will process the information and compute travel times and alert operators of abnormal or incident conditions.

The TMS will also provide the connections for the operators to control the NHDOT's Dynamic Message Signs and Highway Advisory Radios, as well as feed information to the CARS 511 and Traveler Information website. Eventually the TMS will communicate with the 911 and State Police Computer Automated Dispatch (CAD) systems.



That's a Wrap

A new "Ride Free - Breathe Free" marketing campaign funded by the NHDOT features vinyl wrapped paratransit buses in Concord, Nashua, Manchester and the seacoast. "Ride the bus - save money, reduce pollution and protect our future" is the message on the Concord Area Transit bus. The campaign includes fare subsidies on poor air quality days.



Progress Continues on Unique Double Decker Bridge Replacement in Pembroke-Allenstown

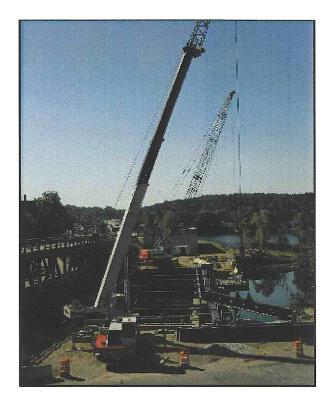
"It's not a typical bridge. This project is a once-ina lifettime opportunity," says Ashok Kakadia of the NHDOT's Construction Bureau. He's talking about working on the new double decker bridge being built on US Route 3 over the Suncook River and Buck Street in Pembroke-Allenstown.

The only double decker bridge in New Hampshire will replace one built in 1931 that was third on the State's Red List of bridges in need of attention.

"We had to plan a bridge to deal with traffic on two different levels," says lead designer Stephen Boyington (Bridge Design). "The new bridge will be higher, stronger and safer than the old one, with six more feet of clearance."

The project has an October 2007 completion date.





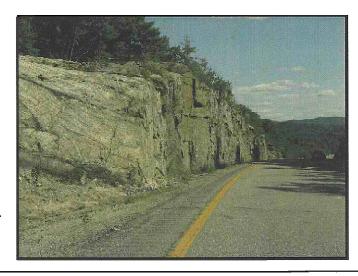
At home in Pembroke - It was a short commute to work this summer for NHDOT intern Stephanie Fowler (left photo) and Ashok Kakadia (Construction Bureau) to the double decker bridge project on US Route 3. Both live nearby in Pembroke. Fowler, a civil engineering major, has returned to Tufts University for her senior year. Ashok has worked for the NHDOT for four years. Both said they have enjoyed working on this unique bridge project.

Serious Ledge Work on I-89 in Sutton

Motorists heading south on I-89 in Sutton this fall are being diverted to two-way traffic on the northbound barrel while ledge blasting and removal is taking place on the southbound lanes.

The work involves removing ledge on the median side and ultimately shifting the lanes.

Weaver Brothers, Inc. of Bow, NH is the contractor for the \$3.4 million project, which is scheduled to be completed in the summer of 2007.





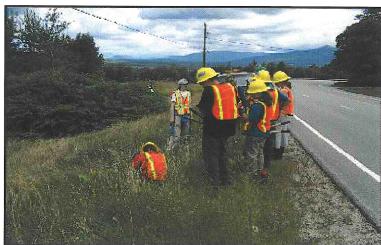
<u>PILOT PROGRAM IN JEFFERSON SEEKS TO CONTROL JAPANESE KNOTWEED</u> <u>INVASIVE BAMBOO-LIKE PLANT AFFECTS ROAD SAFETY AND MAINTENANCE</u>

It was brought to New England for ornamental gardens, but Japanese Knotweed can wreak havoc on natural habitats.

This invasive plant, which looks like bamboo and can grow up to 10 feet tall, can also affect the safety and maintenance along New Hampshire's roadways, as well as threaten wetland areas.

Beginning in August, the New Hampshire Department of Transportation began conducting a pilot control project for Japanese knotweed, a non-native plant that is on the State's "Prohibited Invasive Species" list.

Working in the Town of Jefferson, in cooperation with the Jefferson Conservation Commission, the New Hampshire Department of Agriculture, the USDA Forest Service and the US Fish and Wildlife Service,



Christine Perron (NHDOT Environment Bureau) briefs volunteers from the Student Conservation Association before work began on the Japanese Knotweed treatment pilot project. One of the biggest patches to be treated is located behind her.

the NHDOT project consisted of treating 12 patches of knotweed located along a three-mile section of NH Route 115. Three different types of control methods have been used. Two methods have involved cutting each stem and treating the cut stem with herbicide. The third method has involved injecting herbicide directly into each hollow stem with a special tool. Since all three methods have involved treating each stem individually, the threat to other species has been very minimal.

Volunteers organized by the Jefferson Conservation Commission assisted NHDOT staff by collecting and



After the Japanese Knotweed stems were cut, the NHDOT's Guy Giunta and Paul Rushlow of Roadside Development, who are both licensed pesticide applicators, filled the hollow stems with the herbicide solution.

disposing of cut stems, as well as monitoring the treated patches over the next year. All of the cut knotweed was loaded into a truck, tarped, and taken to a burn pit operated by the US Forest Service. Even a tiny piece of stem can sprout into a new plant, making it essential to keep all of the plan material contained during transport.

This project will help the New Hampshire Department of Transportation gain an understanding of what it will take to implement control of Japanese Knotweed on a larger scale.

According to the "Invasive Plant Atlas of New England", Japanese Knotweed (also known as Mexican bamboo) is native to China, Japan and Korea but can be found in the eastern United States from Maine to Georgia. It was most likely brought to America via Great Britain in the early 1900's for use as a horticultural plant.



Tri-State Maintenance Management Effort Wins International Achievement Award

A three year old effort aimed at better tracking NHDOT assets has been recognized for excellence by the International Road Federation (IRF).

The IRF presented the 2006 Global Road Achievement Award for Maintenance Management to the Tri-State Partnership of the New Hampshire DOT, the Maine DOT and the Vermont Agency of Transportation and their consulting firm Delcan at a conference in Charleston, South Carolina.

The award "recognizes the innovative and collaborative solution to successfully support the maintenance management and reporting needs of each organization while providing effective stewardship of the public trust with respect to the partner states' road network." The three northern New England states were credited for developing and implementing and continuing a maintenance management system which "advances maintenance accountability and achieves cost efficiencies that far exceed the leveraged, collaborative investments of the Tri-State partners."

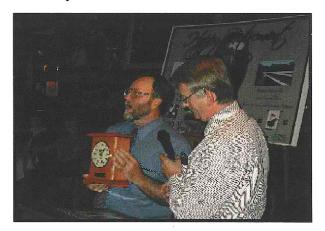
NHDOT Operations Director Lyle "Butch" Knowlton says the agency's maintenance management program (MATS) "has proven to be a valuable tool for accounting for all the work we do on our assets, and provides the ability to continually monitor our investments hour-by-hour and day-by-day."



NHDOT State Maintenance Engineer Caleb Dobbins (center) is flanked by Samuel Lewis (Vermont AOT) and David Bernhardt (Maine DOT) while accepting the 2006 Global Road Achievement Award for Maintenance Management from the International Road Federation at a July conference in Charleston, South Carolina.

Veteran Administrators Ansel Sanborn and Bob Barry Wished Well in Retirement





It was appropriate that the timing of Ansel Sanborn's and Bob Barry's retirements had them linked. Both longtime NHDOT administrators have been valuable and admired employees who long ago earned the respect of their co-workers. Many of Ansel's 36 years of state service were in the Planning Bureau, where he served as Bureau Administrator for the past 15 years. Pictured above left with his wife Jen, the Chichester resident plans to continue to work for the NHDOT on a part-time basis. Bob Barry spent the last 13 years of his 39 NHDOT years as Administrator of the Municipal Highways Bureau. In the above right photo, Bob receives a clock for his state service from Project Development Director Jim Moore at a Concord reception in his honor. The New Hampton resident's immediate plans for retirement include a run for the State legislature.





NEWHIRES

Marc Batchelder, Civil Engineer 2, Construction
Maurice Boivin, Highway Maintainer 2, District 1
Chris Chaloux, Highway Maintainer 1, District 2
Michael Chapman, Highway Maintainer 2, District 1
Aimee Clancy, Program Specialist 4, Aeronautics
David Cody, Highway Maintainer 2, District 4
Michael Cook, Highway Maintainer 1, District 6
Daniel Demers, Highway Maintainer 1, Turnpikes
Phyllis Duncan, Bridge Maintainer 2, Bridge Maint.
Michael Duran, Highway Maintainer 1, Turnpikes
Cassandra Gardner, Civil Engineer 1, Highway Design
George Harmansky, Highway Maintainer 1, Turnpikes
Duane Hunt, Highway Maintainer 2, District 5
Karen Juranty, Engineering Tech. 2, Highway Design
Joanne Lahaie, Accounting Technician, Turnpikes

Elizabeth Malone, Right of Way Appraiser 4, ROW
Neal McGibbon, Highway Maintainer 1, District 6
Barry Moore, Right of Way Appraiser Supervisor, ROW
Jacob Moran, Highway Maintainer 1, District 2
Clinton Mosbeck, Bridge Maintainer 3, Bridge Maintenance
Erik Paddleford, Environmentalist 2, Environment
Robert Poggi, Bridge Maintainer 2, Bridge Maintenance
Filiberto Real, Highway Maintainer 1, District 6
Alan Robinson, Highway Maintainer 2, Turnpikes
Melissa Simmons, Account Clerk 3, Turnpikes
Henry Sliwerski, Highway Maintainer 1, Turnpikes
Matthew Snell, Highway Maintainer 1, District 3
Kelsey Thomas, Civil Engineer 1, Highway Design
Tyler Tommila, Highway Maintainer 2, District 4
Nathan Wheeler, Highway Maintainer 2, District 5

PROMOTIONS

Americo Afonso, Toll Attendant 2, Turnpikes
Mark Aldrich, Bridge Maintainer 3, Bridge Maintenance
Paul Arguin, Ass't Highway Patrol Foreman, District 1
Barry Arseneau, Earch Scientist 1, Materials and Research
Nicholas Bayley, Civil Engineer 3, Construction
Arthur Circelli, Highway Maintainer 2, District 5
Stanley Corneau, Highway Maintainer 2, District 2
Robert Currier, Highway Maintainer 3, District 2
Susan Dean Jones, Accountant 4, Finance and Contracts
Ryan Dicey, Highway Maintainer 2, District 5
Travis Dickinson, Highway Maintainer 2, District 5
Ronald Dionne, Bridge Maintainer 3, Bridge Maintenance
James Drury, Warehouse Supervisor, Bridge Maintenance
Kenneth Dufour, Construction Foreman, District 1

Robert Eaton, Highway Maintainer 3, District 6
Richard Fenoff, Highway Patrol Foreman, District 1
Zachary Gauthier, Geological Exploration Tech. 1, M&R
Craig Gilcris, Bridge Maintainer 3, Bridge Maintenance
Chad Hayes, Civil Engineer 2, District 6
Richard Jameson, Highway Maintainer 3, Turnpikes
Gerard Lamson, Highway Maintainer 2, District 3
James Lesage, Info. Center Attendant 2, Turnpikes
Shawn Mackillop, Construction Foreman, District 1
Merle Patenaude, Highway Maintainer 2, District 2
Theresa Raymond, Supervisor 4, Finance and Contracts
Alyssa Ribitski, Info. Center Attendant 1, Turnpikes
Linda Smith, Right-of-Way Agent 3, Right-of-Way
Sean Wolters, Highway Maintainer 2, District 3

RETIREMENTS (years of service)

Robert Barry, Planning & Community Assistance (39)
David Clough, District 1 (30)
Patricia Hill, Finance and Contracts (19)
Garry Kenyon, District 4 (30)
Ansel Sanborn, Planning & Community Assistance (36)
Ronald Scovil, Mechanical Services (36)
Alfred Szepan, District 5 (30)
John Vanuden, Turnpikes (15)





SERVICE AWARDS



October through December 2006

35 YEARS

Richard Barrett, District 5

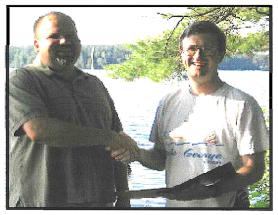
James Colburn, Commissioner's Office

30 YEARS

Ronald Spalthoff, Construction John Hunt, Bridge Maintenance James Amrol, Materials & Research Robert Reinhard, District 1

25 YEARS

James Brown, District 6
Terry Hall, District 4
Gary Kitson, District 6
Terry Mason, District 3
Gregg Miles, Bridge Maintenance
Stephen Trottier, District 6



District 2 Engineer Alan Hanscom (right) receives his 20-year Service Certificate from Highway Maintenance Administrator Caleb Dobbins at an undisclosed location.

20 YEARS

Alan Hanscom, District 2
Reid Deinhardt, Bridge Maintenance
Kenneth Dufour, District 1
David Frost, District 5
Reginald Hartford, Mechanical Services
Dale Huckins, District 3
Phillip Huntley, Highway Maintenance
Ronald Pierce, District 1
Russell Pilotte, District 1
Alan Toshack, District 3
Gary Biggart, District 1
Darren Hubbard, Bridge Maintenance
Peter LaBranche, District 6
Harry Walker, District 5
Cary Weatherbee, District 2

15 YEARS

Patricia Bailey, District 6
Elaine Belisle LaPoint, Turnpikes
Roger Biron, Mechanical Services
Robert Boynton, District 3
Laurence Coakley, Turnpikes
William Hebert, District 5
Dennis Herrick, Construction
John Leonard, Bridge Maintenance
Jerry Martin, Mechanical Services
Denis Neveu, Turnpikes
Paul Robichaud, District 4
Leslie Silver, District 5
Linda Smith, Right-of-Way
Micheal Mooney, District 4
Chris Sullivan, District 6

10 YEARS

Harry Hadaway, Right-of-Way Dawn Pulica, Right-of-Way Louis Barker, Rail & Transit Leo Paul Caron, District 1 Michael Lavoie, District 6 Tobey Reynolds, Highway Design Stephen Tolbert, District 2 Peter Whitney, District 1

On the Move

Manchester's Granite Street Project Cited by Federal Highway Official for Economic Importance



Jim Ray, Chief Counsel of Federal Highway Administration, speaks with Construction Bureau Administrator Ted Kitsis (left) and Contract Administrator Tim Chapman about the benefits of the project to complete the Exit 5 interchange of I-293 in Manchester.

It's hard to miss the Granite Street project. After all, it's right in the middle of New Hampshire's largest city at Exit 5 of Interstate 293 in Manchester.

The need for completing the existing partial interchange is obvious. It will improve access to and from I-293 and relieve traffic congestion at Exits 4 and 6, which are near bridges that cross over the Merrimack River into the downtown section of the Queen City.

The project includes the replacement of the existing turnpike bridge over Granite Street, the reconstruction of the Exit 5 interchange to a single point urban interchange (similar to I-93's Exit 13 in Concord), and the addition of an I-293 southbound off-ramp to Granite Street and northbound on-ramp to I-293.

of-way, preliminary engineering and construction costs) will tie in with a new \$20 million Granite Street Bridge over the Merrimack River, a project overseen by the City of Manchester.

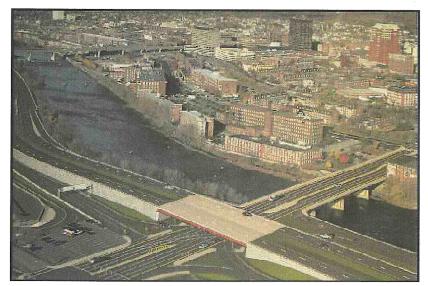
The highly visible project also promises to be a boost for the economic vitality of Manchester, given its proximity to the downtown area and such key new venues as the Verizon Wireless Arena and the new riverside ballpark where the New Hampshire Fisher Cats play professional baseball. And that beneficial connection has drawn the attention of the Federal Highway Administration (FHWA). Jim Ray, the FHWA's Chief Counsel, came to New Hampshire on September 1 to tour the Granite Street Project and called it "a good example of how investments in transportation support our economy".

"The I-293 interchange improvements and the Granite Street Improvement Project will ease gridlock and

enhance traffic flow in this area," Jim Ray said. "These improvements will support new jobs, while stimulating future job growth as well."

That theme is echoed by Robin Comstock, President of the Greater Manchester Chamber of Commerce.

"It's our belief that the Granite Street project will relieve traffic congestion and provide residents and visitors easier access to downtown Manchester," Comstock says. "Bringing more people to downtown Manchester will not only benefit the businesses currently located there, but will hopefully attract new businesses to settle there. The Greater Manchester Chamber of Commerce is excited to support and promote such projects as this and eagerly looks forward to its completion."

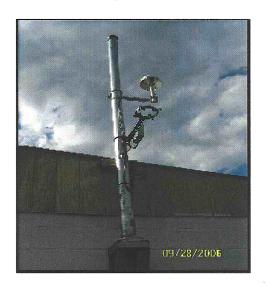


This computer enhancement shows what the I-293 Exit 5 interchange improvements and the new Granite Street Bridge in Manchester will look like when completed in May of 2008.

Anti-Icing System Installed on Connecticut River Bridge Between NH and VT

Motorists traveling from Vermont into New Hampshire on Interstate 89 will have an extra layer of security this winter with the installation of an anti-icing system on the southbound bridge over the Connecticut River.

Operations forces from Highway Maintenance and Bridge Maintenance teamed up to install a Fixed Automated Spray Technology (FAST) anti-icing system. The research project is a joint effort by the NHDOT and the Vermont Agency of Transportation.





The FAST system will automatically apply liquid de-icing chemicals to a bridge <u>before</u> the deck freezes. A partial Road Weather Information System (RWIS) (left photo) and deck sensors will collect environmental data to control the system. The anticipated benefits include a quicker response to winter-related slippery conditions and reduced maintenance costs.

In the above photo, Bridge Maintainers from Crew 4 weld brackets on the back of the bridge guardrail posts to attach conduit containing the control cables and anti-icing liquid tubing. Spray nozzles and tubing were installed in a sawcut running the length of the bridge in the center of the pavement.

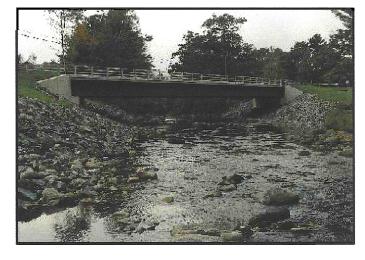
Night work was required because of the daily traffic volume crossing the bridge with the District 2 Patrol 224 crew providing traffic control and construction assistance.

A New NH Route 25 Bridge in Warren -Wentworth

A new wider bridge on NH Route 25 near the Warren-Wentworth town line has replaced a narrow Red List bridge built in 1928 that was the scene of a tragic crash several years ago that killed two NH State Troopers and a passenger.

A nearby memorial honors Troopers Gary Parker and Joseph Gearty who died in a crash with a logging truck on November 29, 1989.

This \$2.7 million project involved replacing the Baker River Bridge on a new alignment, reconstructing and widening Route 25, and constructing a sidewalk near the Wentworth Elementary School.





"Not Survey" Team Captures 2006 Commissioner's Cup for Second Time in Three Years

For the second year in a row the winning team shot a nine under par 61. And for the second consecutive year the winner was determined by a scorecard tie-breaker where the winner was determined by comparing the scores on the toughest holes.

The "Not Survey" team emerged as the winner of the 17th annual Commissioner's Cup for 2006, the second time in two years that this team has won the prestigious Cup. Members of this year's winning team were Kerrie Hartshorn, Ron Woods, Al Cilley and Keith Lemire.

Shooting the same score on the 18-hole Pheasant Ridge course in Gilford was the "Design Team" of Wayne Clifford, Bob Davis, John Butler and John Robinson.



The 2006 Commissioner's Cup winning "Not Survey" team members included: Kerrie Hartshorn (Geodetic Survey), Ron Woods (Right of Way) Al Cilley (Engineering Audit) and Keith Lemire (Right-of-Way).

1st Place	2ndPlace	3rd Place	4th Place
Not Survey (61)	Design (61)	The Shirts (63)	District 1/Bridge (64)
Al Cilley	Wayne Clifford	Bill Cyr	Brian Charland
Keith Lemire	Bob Davis	Jerry Romano	Skip Derosia
Ron Woods	John Butler	Bob Richards	Bob Lennard
Kerrie Hartshorn	John Robinson	Dennis Herrick	Jeff Judd



Bridge Maintenance employees Earl Caddel, Nate Brown and Todd Courser check out the progress of their repair project on the double arch stone bridge in Stoddard that was damaged in the floods of October 2005

Flood-Damaged Twin Arch Stone Bridge in Stoddard Gets Repaired

Motorists traveling on NH Route 9 in Stoddard were able to track the progress of repairs in August and September to the historic twin arch stone bridge just off the highway that was damaged by flooding in October 2005.

The NHDOT Bridge Maintenance crew used a variety of old and new techniques to get the job done, including reconstructing a damaged arch with the same method used by the original builders more than 150 years ago.

According to the *Union Leader*, "the men of the crew have gained a reputation for the careful and accurate restoration of a number of historic covered bridges around the state, as well as another stone bridge in Pelham."

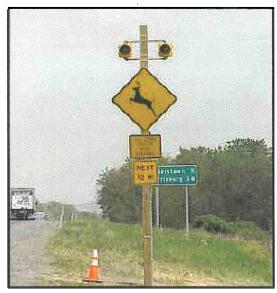


Study Results Promising for Helping to Reduce Wildlife-Vehicle Collisions New Hampshire one of 15 States Participating in Nationwide Research Project

New Hampshire and other states plagued by animal-vehicle collisions are one step closer to being able to use high-tech equipment to address the highway safety problem that kills more than 200 people every year across the country.

New research findings show that electronic animal detection systems in use around the world have reduced collisions with large animals by 82%.

A six-year joint research project by 15 states (including the New Hampshire Department of Transportation) has included an experiment that has reviewed, developed and tested animal detection systems that alert drivers to the presence of wildlife on or near the road ahead. Once a large animal is detected, warning signs are activated urging drivers to reduce the speed of their vehicles, to be more alert, or both.



Warning signs and signals at a Pennsylvania site.

"This is a very promising technology that can help make roadways in the U.S. a lot safer," says Dr. Marcel Huijser, the lead investigator for the project from Montana State University. "We have the kind of results that urge us to fine tune this technology so that it can be deployed across the country."

The primary test site for the research project was on U.S Highway 191 in Yellowstone National Park in Montana. The project resulted in an animal detection system technology, developed by an Arizona company, that detects large animals reliably. The effectiveness of this system in reducing animal-vehicle collisions will be further evaluated over the next two years.

NHDOT District One Engineer Greg Placy has been one of the participants in the research effort. "Certainly residents of northern New Hampshire have some real safety concerns regarding the potential for moose and deer collisions. I believe we are making some real progress in trying to come up with some possible solutions that could reduce the risk of these kind of collisions," Placy says.

It's estimated that up to 1.5 million crashes between vehicles and large hoofed animals occur every year in the United States. In addition to the 200 human fatalities, there are approximately 29,000 human injuries and over one billion dollars in property damage. In a growing number of



A typical receiver/transmitter station at an Indiana site.

states, including New Hampshire, wildlifevehicle collisions are one of the top highway safety issues that generate public interest and

The researchers calculated the average total costs associated with an animal-vehicle collisions at \$28,100 for moose and \$7,800 for deer. The research also concluded that animal detection systems can be cost effective, paying for themselves at locations that have an average of at least five deer or two moose collisions per mile per year.

The full 200+ page research report (PDF file) can be downloaded from the following web link: http://www.oregon.gov/ODOT/TD/TP RES/ ResearchReports.shtml





LETTERS

July 7, 2006

I am writing to inform you of a wonderful experience that happened in early/mid May. I left my wallet on a friend's vehicle and it was dislodged in Nashua, NH between exits 3 and 5 going southbound. My wallet was found by one of your employees with almost 600 dollars in cash, checkbook, credit cards and license.

Mark Bolduc (Highway Maintainer 2/Turnpikes) went entirely out of his way to return it untouched to me. I am from Colorado and was in NH on vacation. He ended up finding me through AAA. He is like an angel to have gone through what he did so honestly to return it to me. I offered him a reward for his help and honesty which he refused to take. I am writing to extend my thanks and let you know how lucky you are to have such honest and hard working people working for you and the State of NH.

Christy Tryder Frisco, Colorado

Editor's note: The above letter was sent to Turnpikes Bureau Administrator Harvey Goodwin.

Newbury Police Department

July 12, 2006

I am writing to thank you and your staff (#216 Patrol Section) for the assistance provided during Newbury's Old Home Day that took place this past weekend. The constant support to the Town by Steve Chellis (Patrol Foreman), Ken Burnell (HM II) and Joe Bard (Assistant Patrol Foreman) has always been exemplary, and their past effort was no exception.

Newbury's Old Home Day was filled with various activities that spanned the course of the day and night, and was received with high marks from the citizens who came to enjoy it all. The success of the event can in part be attributed to your department and its personnel. The barricades and cones that were provided, and the assistance given by the staff, served to provide an environment of safety that surpassed expectations. The change in the roadway's character that was created with the help of your equipment separated pedestrian and vehicular traffic, slowed vehicle speeds, and provided passive direction control.

On behalf of the Newbury Police Department, and the Town of Newbury, congratulations on yet another job well done!

Robert Lee Chief of Police

Editor's note: The above letter was written to District 2 Engineer Alan Hanscom.

Town of Pelham

Office of the Selectmen

June 19, 2006

Dear Commissioner Murray:

Like many communities in Southern New Hampshire, Pelham experienced severe flooding in recent weeks. This flooding caused massive damage to our transportation infrastructure which is still being evaluated. We would like to take this opportunity to personally thank you, your staff, and Hiram Morrill of District 5 for your immediate attention to Pelham's state roads and for keeping them maintained and passable during our crisis.

We feel the communications were excellent and the response of your staff is to be commended. Once again thanks for your prompt and professional assistance.

Pelham Board of Selectmen



New State BioDiesel Fueling Station Attracts Media Attention in Durham Facility's Opening Marks First Use of Biodiesel Alternative Fuel by DOT and UNH Vehicles

"This project is another example of state government leading by example," noted Governor John Lynch, just minutes before he personally filled NHDOT and UNH vehicles with biodiesel fuel.

The event on August 2 marked the opening of a facility in Durham that is the first use of biodiesel fuel by New Hampshire state vehicles.

Biodiesel is a diesel fuel replacement processed from vegetable oils such as soybean or canola oil or from animal fats. It is typically blended with petroleum diesel, with the most common blend being 20% biodiesel (B20). The NHDOT recently installed the fuel tank dedicated to biodiesel at the fueling station at UNH in response to a legislative study committee recommending that DOT lead a State pilot program for use of a 20% biodiesel blend. Both NHDOT and UNH will be using the B20 from this fueling site in many of their diesel vehicles, as well as local communities and school districts who fuel at this site.



Governor John Lynch took a turn fueling both a NHDOT vehicle and a UNH bus with biodiesel fuel at an August 2nd media event recognizing the opening of an alternative fuel facility in Durham. The Governor credited state government for leading by example.

"We've all been impacted by higher fuel prices as a state and as a nation, and in New Hampshire we are working to take greater control over our energy future by looking at reducing our energy use and by exploring alternative fuels," Gov. Lynch said. "Biodiesel is a cleaner burning, domestically produced renewable energy. By using biodiesel, we can reduce pollution and help support the development of alternative fuels — which can help us create a more secure, independent energy future and also help drive the creation of new jobs and industries here in New Hampshire."

"We are pleased to be part of this project which is a first for the State of New Hampshire," noted Carol Murray, DOT Commissioner. "The New Hampshire Department of Transportation intends to continue to pursue alternative fuels and technologies that will result in a cleaner fleet and reduced emissions."

UNH Interim President J. Bonnie Newman was on hand to highlight ongoing transportation initiatives at UNH to reduce greenhouse gas emissions and to showcase UNH's new clean fleet logo – the Eco-Cat – and cleaner diesel fleet, which includes biodiesel and alternative fuels like compressed natural gas, hybrid and full electric.



New District 6 Patrol Facility

The Dover #606 crew in District 6 is now operating out of a brand new facility that replaces one built about a century ago.

The new 5,000 square foot building at 50 Gerrish Road has therm-paned windows, and according to District 6 Assistant Engineer Steve Ireland "Great Lighting!".

The 2x8 construction with vinyl siding replaces a structure with concrete block walls, and is conveniently located next to an existing salt shed. It was built at a cost of \$700,000.

On the Move



NHDOT People



Aimee Clancy has joined the Aeronautics Division as an Aviation Program Supervisor. In her position she will oversee aviation safety and education throughout the state. Aimee has relocated to New Hampshire from Florida to be closer to her family. She most recently was the airport manager at Herlong Airport in Jacksonville Florida.



Traffic Bureau employee Brent Jackson, Jr., age 23, died tragically in a drowning accident in Alstead on July 18. While he was only a NHDOT employee for a few weeks, he was well-liked by his co-workers, who tried in vain to save him. A memorial fund in Brent's name has been established at the Citizens Bank on Loudon Road in Concord. Donations to the "Brent W. Jackson, Jr. Memorial Fund" can be forwarded to the Bureau of Finance and Contracts.

30 Years of State Service





Veteran NHDOT District 5 employees Alan Piroso (above left) and Al Szepan were each recognized by Governor John Lynch for 30 years of State service. Alan Piroso is a Patrol Foreman. Al Szepan is a Dispatcher.



Materials & Research

NHDOT Credited For Work to Assess the Condition of Rock Reinforcement Systems

Dating back to the early 1970's, transportation agencies, including the NHDOT, have used metal reinforcements to stabilize highway rock slopes. While these systems are expected to last 50 years, conditions vary from site to site and so do the results. Replacing these systems can be expensive and difficult.

The NHDOT's effort to determine the actual condition of the rock reinforcement sites has been recognized by the national Transportation Research Board in a publication entitled "Research Pays Off: Assessing the Condition and Estimating the Longevity of Rock Reinforcement Systems."



The drilling on Barron Mountain in Woodstock helped confirm that only a portion of the metial reinforcements would have to be replaced or rehabilitated.

"To solve this problem, the New Hampshire DOT initiated a two-phase research study to assess the condition of a 32-year old rock reinforcement along I-93 in Woodstock. Before the testing, New Hampshire DOT was concerned that nearly all the reinforcement at the Woodstock site would need to be replaced in the near future, at a cost of more than \$1.5 million. The results of the research project, however, indicate that only a portion of the reinforcement will require replacement or rehabilitation, at an estimated cost of \$400,000 - a potential savings of \$1.1 million for the site. Benefits can be realized by applying this technology at other sites in New Hampshire and in other states."

Bridge Maintenance Responds with Emergency Repairs to Hampton Beach Pavillion

The problem involved the structural stability of large overhead concrete slabs. No, not at the Big Dig tunnels, but on a section of the popular Pavillion, also known as the Seashell, at Hampton Beach State Park.

In response to a request for help from the Parks Division of the Department of Resources and



Economic Development, NHDOT Bridge Maintenance Crew #7 moved in and made some emergency repairs to shore up the structure.

In a letter of thanks to Commissioner Carol Murray, DRED Commissioner George Bald wrote, "Loaning us your very professional staff to insure that the problem was dealt with quickly helped to provide a safe environment for the many visitors to that area. The amount of time you and your team have put into resolving this problem, demonstrates that you are committed to making State government work."

Members of Bridge Maintenance Crew #6 who worked on the project include: Paul

Spinney, Ken Thouroughgood, Ronald Dionne, Peter Wallace and Michael Smith.



More Letters

August 5, 2006

I am writing to commend the courtesy, professionalism and outstandingly fine work of DOT - District 4. After enduring the ever increasing flooding spring rains of the past several years, this year topped all others leaving a wide and extensive area of the road, driveway and much of our property flooded for several days. We live in an old farm house on Route 136 in Francestown.

I called District 4 and spoke with Charles Willeke, the Assistant District Engineer. The next day Charles came to take photos. Mr. Willeke returned with Chief Engineer Douglas Graham and others. They came up with a viable solution to the increasing problem by redesigning the ancient small culverts so that they could handle future heavy rains and spring run-off.

Under the direction and leadership of Construction Foreman, Jack Berquist, the crew also deserves high praise. Mr. Berquist set the work ethic for his crew. His years of experience and practical knowledge were evident in solving site condition problems that came up and led to the successful completion of this project. He was outstanding. This dedication and professionalism is a fine reflection on your department.

H. Robert Carey Francestown, NH

July 30, 2006

On July 26th, my friend and I traveled to Manchester, NH to get friends at the airport. We stopped at the Canterbury Rest Area and upon returning to our vehicle, we found that our right front tire was flat.

We were two ladies quite distressed as I did not have Triple A. We went back to the rest area and related our problem. A kind state employee by the name of Bob Boynton helped us with our crisis. This kind, polite gentleman changed our tire and made certain we were safe for our journey. He refused to take money for his effort.

Be proud to have such men working for you. He acted above and beyond his work expectations and in my book, he is a true "hero".

Pauline Donovan Milan, NH August 10, 2006

We would like to commend (Water Supply Technician) Michael Dennis for his dedication and expertise on taking care of our water problem. He was very informative on the test results for two years, and he was a perfect gentleman to do business with. His knowledge and experience in the drilling and installation of our well was very impressive.

The N.H. Department of Transportation is fortunate to have this caliber employee to represent them and be part of their team. It was a pleasure to have Mr. Dennis oversee our new well installation. We are very happy with our new system, and grateful with the outcome.

Roger J. Snow Gilford, NH



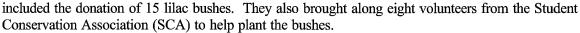
Highway Design

Roadside Maintenance Contributes to a Gateway Sign Project in Meredith

One of the more scenic towns in New Hampshire is creating an even better first impression for visitors, thanks in part to the efforts of the NHDOT's Roadside Maintenance Office.

The new "Welcome to Meredith" sign at the intersection of US Route 3 and NH 104 is part of a civic beautification project that includes landscaping the area around the sign. The project started with the removal of poison ivy and preparing the area for planting.

The NHDOT's contribution, led by Guy Giunta and Barbara Rollins,

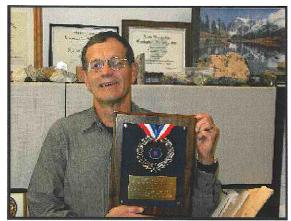


Based out of Charlestown, New Hampshire, the SCA is a volunteer organization made up of students from across the country. The NHDOT is the first transportation agency in the country to work with this volunteer organization. The SCA spends about one month every summer doing volunteer work for communities around New Hampshire, including trail restoration, planting, and other "service to the land" activities.

In a letter to Commissioner Carol Murray, Greater Meredith Program Executive Director Jeanie Forrester wrote, "This project was a collaborative effort that really is the hallmark of what Meredith is all about. That we can now add the New Hampshire Department of Transportation to our list of organizations and people who volunteer on the community's behalf is very special to us."



Materials and Research



NHDOT Geologist Dick Lane was presented with a national award for public service at the annual meeting of the American Institute of Professional Geologists in St. Paul, Minnesota on September 26.

Dick Lane Receives National Award from American Institute of Geologists

NHDOT Geologist Dick Lane has been recognized for his career work with an award from the American Institute of Professional Geologists (AIPG). Lane is the 2006 recipient of the AIPG John T. Galey Sr. Memorial Public Service Award for "his outstanding record of public service beyond his normal professional responsibilities."

A NHDOT employee since 1977, Dick Lane's focus has been on "designing and constructing safe and economical roads, on identifying and mitigating geological hazards, and on conducting transportation-related geological research." Dick was co-founder and first president of the Geological Society of New Hampshire.

Roads Once Traveled...



Where in the 'ell is New Hampshire? It seems a contractor working for the Maine DOT came up a little short with a New Hampshire directional sign. This of course is not meant as a dis to our neighbors to the north. We know they would do the same for us!

NH DEPARTMENT OF TRANSPORTATION

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